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Benjamin Firooz Ghassabian

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44696

7590

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EXAMINER

LAM, VINH TANG

ART UNIT

PAPER NUMBER

2629

NOTIFICATION DATE

DELIVERY MODE

08/02/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/553,575	<b>Applicant(s)</b> GHASSABIAN, BENJAMIN FIROOZ	
	<b>Examiner</b> VINH LAM	<b>Art Unit</b> 2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) 1-34,42,43,47,51,53 and 55-80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-41,44-46,48-50,52,54 and 81 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/13/2010</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim **44** objected to because of the following informalities: Typographical error.

“...the system of claim **42**...” should be “...the system of claim **35**...”

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **35-41**, **44-52**, **54**, **60-66**, and **68-80** are rejected under 35 U.S.C. 103(a) as being unpatentable over **King et al. (US Patent No. 6011554)** in view of **Goren (US Patent No. 7190351)**.

Regarding Claim **35**, (Currently amended) **King et al.** teach a data entry system, comprising:

an input unit (*Col. 6, Ln. 16-35, FIG. 1A, i.e. 50*) adapted to receive a plurality of first input signals (*Col. 6, Ln. 16-35, FIG. 1B, i.e. signals from left two rows of keys 56*), wherein at least some of the first input signals (*Col. 6, Ln. 16-35, FIG. 1B, i.e. signals from left two rows of keys 56*) are together associated with substantially all the letters

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(Col. 6, Ln. 16-35, FIG. 1B, i.e. keys 56 which include letter groups **RPQ**, **ADF**, **OLX**, **EWV**, **CYK**, and **THJ**) of a language (Col. 6, Ln. 16-35, FIG. 1B, i.e. English letters) such that at least one (Col. 6, Ln. 16-35, FIG. 1B, i.e. one of keys 56) of the first input signals is associated with more than one letter (Col. 6, Ln. 16-35, FIG. 1B, i.e. top row and left most key which includes at least **RPQ**); and

a word predictive system (Col. 6, Ln. 17-45, FIGs. 1A & 1B, i.e. keyboard disambiguating system 50) adapted to select a word (Col. 7, Ln. 19-42; Col. 20, Ln. 1-6, FIG. 6, i.e. **done**) from a word database (Col. 7, Ln. 19-42, FIG. 6, i.e. selection list 76) responsive to a sequence (Col. 7, Ln. 19-42, i.e. **ADF**, **OLX**, **NBZ**, and **EWV**) of first input signals provided by a user (Col. 8, Ln. 15-24, FIG. 6),

wherein the input unit comprises a plurality of keys representing the first input signals to which the letters are assigned (Col. 6, Ln. 16-35, FIG. 1B, i.e. keys 56).

However, **King et al.** do not teach that said keys being arranged in two groups, wherein each group is configured for use by a different finger of the user.

In the same field of endeavor, **Goren** teaches said keys being arranged in two groups (Col. 21, Ln. 19-33, FIG. 24B, i.e. 504 & 506), wherein each group is configured for use by a different finger of the user (Col. 21, Ln. 19-33, FIG. 24B, i.e. **Left and Right**).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine **King et al.** teaching of a data entry system comprising plurality of input buttons having word prediction capability with **Goren**

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teaching of arrangement of input buttons in left and right columns *to provide faster and easier data input.*

Regarding Claim **36**, (Currently amended) the system of claim 35, **King et al.** teach comprising:

an output unit (*Col. 20, Ln. 1-4, FIG. 6, i.e. display 53*) for displaying the selected word (*Col. 20, Ln. 12-1, FIG. 6, e.g. done*) to a user; and

a second input unit (*Col. 6, Ln. 16-35, FIG. 1B, i.e. right row of keys 56*) adapted to receive second input signals (*Col. 6, Ln. 16-35, FIG. 1B, i.e. signals from right row of keys 56*) corresponding to the letters of the language (*Col. 6, Ln. 16-35, FIG. 1B, i.e. keys 56 which include letter groups NBZ, IMG, and SU*),

wherein the word predictive system is adapted to select a word (*Col. 20, Ln. 12-1, FIG. 6, e.g. done*) for a sequence of first input signals (*Col. 7, Ln. 19-42, i.e. ADF and OLX*) by using received second input signals (*Col. 7, Ln. 19-42, i.e. NBZ*).

Regarding Claim **37**, (Currently amended) the system of claim 36, wherein the second input unit is adapted to receive speech signals corresponding to the letters of the language which is well-known in the art as "Speech Recognition".

Regarding Claim **38**, (Previously presented) the system of claim 37, comprising a recognition system which uses the speech signals corresponding to the letters of the alphabet in selecting for first input signals a single letter from the group of symbols associated with the first signal which is well-known in the art of "Speech Recognition".

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Regarding Claim **39**, (Currently amended) the system of claim 35, wherein **Goren** teaches the two groups of keys are located on opposite sides of a device (*Col. 21, Ln. 19-33, FIG. 24B, i.e. 504 & 506*).

Regarding Claim **40**, (Currently amended) **King et al.** and **Goren** teach the system of claim 35.

Although **King et al.** and **Goren** do not explicitly teach that the data entry system comprises four keys, each key being used to generate one of the first input signals, the four keys together being associated with substantially all the letters of the language.

However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to recognize that each key being used to generate one of the first input signals, the four keys together being associated with substantially all the letters of the language would have been an obvious Choice of Design (as suggested by **King et al. FIG. 1B or 9**).

Regarding Claim **41**, (Currently amended) the system of claim 40, wherein **Goren** teaches the keys of each group are arranged so as to form two columns of keys (*Col. 21, Ln. 19-33, FIG. 24B, i.e. 504 & 506*).

Regarding Claim **44**, (Currently amended) the system of claim 42, wherein **King et al.** teach at least some of the first input signals are together associated with all the letters of the language.

Although **King et al.** and **Goren** do not explicitly teach that the at least some of the first input signals are together associated with all the letters of the language.

However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to recognize that at least some of the first input signals are together associated with all the letters of the language would have been an obvious Choice of Design (as suggested by **King et al.** FIG. 1B or 9).

Regarding Claim 45, (Currently amended) the system of claim 35, wherein **Goren** teaches the two groups of keys are located on opposite sides of a screen associated with the system (*Col. 21, Ln. 19-33, FIG. 24B, i.e. 504 & 506*).

Regarding Claim 46, (Currently amended) the system of claim 40, wherein **King et al.** teach the keys comprise at least one of virtual keys and physical keys (*Col. 6, Ln. 16-35, FIG. 1A*).

Regarding Claim 48, (Previously presented) the system of claim 40, wherein **King et al.** teach different interactions with the keys correspond to different signals (*Col. 6, Ln. 28-33, FIG. 1B, e.g. 1, 4, and 7...*).

Regarding Claim 49, (Previously presented) the system of claim 48, wherein **King et al.** teach the keys respond to two different types of interactions, a first type of interaction corresponds to respective ones of the first signals and a second type of interaction corresponds to symbols other than those represented by the first signals (*Col. 6, Ln. 28-33, FIG. 1B, e.g. 1, C, Y, or K...*).

Regarding Claim 50, (Previously presented) the system of claim 49, wherein **King et al.** teach the keys are associated with respective ones of the first signals when pressed slightly and with other symbols when pressed heavily (*Col. 6, Ln. 28-33, FIG. 1B, e.g. 1, C, Y, or K...*).

Regarding Claim **52**, (Currently amended) the system of claim 35 , wherein **King et al.** teach the letters of the language are assigned (*Col. 6, Ln. 16-35, FIG. 1B, i.e. keys 56 which include letter groups RPQ, ADF, OLX, EWV, CYK, and THJ*).

Regarding Claim **54**, (Currently amended) the system of claim 40, wherein **Goren** teaches the letter keys of each group are arranged so as to form two columns of keys (*Col. 21, Ln. 19-33, FIG. 24B, i.e. 504 & 506*).

Regarding Claim **81**, (New) the system of claim 40, wherein **Goren** teaches the letter keys of each group are arranged so as to form two rows of keys (*Col. 21, Ln. 19-33, FIG. 24B, i.e. 504 & 506*).

### ***Response to Arguments/Amendments/Remarks***

3. Claims **1-34, 42-43, 47, 51, 53, 55, 56-59, and 60-80** are cancelled.
4. Applicant's arguments filed 05/29/2011 have been fully considered but they are not persuasive.

First of all on Pages 7-8, applicant argues that “**Goren** does not teach two separate groups of keys where the keys comprise letters. **Goren** also does not teach two separate groups of keys where at least some of the keys comprise groups of letters on each key. Moreover, **Goren** also does not teach two separate groups of keys spanning substantially the entire alphabet so that the user can actuate substantially any

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letter of the alphabet at any given time.”. The Examiner respectfully agrees because it is not Goren who teaches the above limitations, it is **King et al.** teach those limitations.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Secondly on Page 9, applicant argues that combination of **King et al.** and **Goren** would make no sense. However, the Examiner respectfully disagrees because both of the references are in the same field of endeavor concerning input device. **King et al.** teach all of Claim 35's limitations except the **arrangement** of the keys into two groups for use with user's hands. **Goren** clearly suggests that the keys would have been arranged into two groups for use with user's hands. The combination of **King et al.** and **Goren** teach are readable on the entire Claim 35's limitation. The combination does not mean that the each and every structures/steps of entire **Goren** teaching is integrated into **King et al.** system, however.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH T. LAM whose telephone number is (571)270-3704. The examiner can normally be reached on M-F (7:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vinh T Lam/  
Examiner, Art Unit 2629

/Amare Mengistu/  
Supervisory Patent Examiner, Art Unit 2629